yw

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,902	01/24/2001	Arthur Doskow	414.037CIP/10007267	2892

32127 7590 12/17/2004

VERIZON CORPORATE SERVICES GROUP INC.
C/O CHRISTIAN R. ANDERSEN
600 HIDDEN RIDGE DRIVE
MAILCODE HQEO3H14
IRVING, TX 75038

EXAMINER	
AL AUBAIDI, RASHA S	

ART UNIT	PAPER NUMBER
2642	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/767,902	DOSKOW ET AL.	
	Examiner	Art Unit	
	Rasha S AL-Aubaidi	2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/02/2001*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 26 as numbered by the applicant in the application is objected to because of the following informalities:

Claim 26 as numbered by applicant on page 56, lines 1, should be numbered as claim 25. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silva (US PAT # 5,987,035) in view of Heilmann et al (US PAT # 6,718,024).

Regarding claim 1, Silva teaches a communication network (this may read on the PSTN or private network see col. 2, lines 46-47) comprising: local communication links (this is reads on the network line interfaces 4, see col. 2, lines 44-47), a plurality of separately located central office switching systems (reads on different SSP, see col. 1, lines 41-42) interconnected via trunk circuits (reads on analog trunk/line line cards 26, see col. 2, lines 44-27) for selectively

providing switched call connections between at least two of the local communication links in response to predetermined control data messages (this is inherent), a signaling communication system (this reads on SS7, see col. 4, lines 2-5) for two-way communications of said control data messages between at least said central office switching systems, said signaling communication (SS7) system interconnecting the central office switching systems, and a signaling system security monitor (this reads on CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47), separate from the central office switching systems (see col. 6, lines 11-13), said signaling system security monitor including a plurality of message templates (reads on message template 100, see col. 4, lines 56-62, col. 5, lines 1-3, also Fig. 4) corresponding to approved ones of said control data messages.

Silva does not exactly teach a signaling gateway that is separate from the central office switching systems and connected to said signaling communications system, said signaling gateway including an interface connected to a remote communications network and configured to exchange said control data messages between said remote communication network and said signaling communication system.

However, Heilmann teaches a system and method for discriminating call content types for individual telephone lines at a plurality of user sites outside of a Public Switched Telephone Network (PSTN). See abstract of the invention.

The use of a gateway is obvious and a must between two networks that are communicating between each other. Heilmann also teaches the gateway including an interface (this interface reads on the line interface unit 201, Fig. 2A, and col. 5, line 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of having a signaling gateway that is configured to exchange said control data messages between two communication networks, as taught by Heilmann, into the Silva system in order to ensure that the messages, that are received and sent to each network already screened, verified, and filtered based on the set rules.

Claim 26 is rejected for the same reasons as discussed above with respect to claim 1.

Regarding claims 2 and 27, Silva teaches plurality of messages templates are associated with a plurality of service providers (see col. 1, lines 40-44).

Regarding claims 3 and 28, signaling system security monitor (this reads on CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47) associates each of said control data messages with a corresponding one of said service providers and selects one of said message templates in response to the corresponding one of said service providers. This basically reads

on screening the call and comparing the content of the call by with the matching content that are already in the template (memory/database), see Fig. 4, col. 5, lines 23-50).

Regarding claim 4, Silva teaches a memory storing sets of templates each of said sets corresponding to control messages appropriate to particular call progress or transaction flow (see RAM 82 and 92 where the templates stored on col. 4, lines 40-43, also, col. 6, lines 15-29).

Regarding claims 5, 14 and 30, Silva teaches the template define message formats, parameters and values associated with control message types selected from ISUP (see col. 4, lines 48-50) and MTP 2 and 3, see col. 5, lines 23-30). Obviously, any AIN type messages such as SCCP and TCAP can be used.

Claims 6 and 31 are rejected for the same reasons as discussed above with respect to claims 3 and 4.

Regarding claims 7-8 and 32, Silva teaches signaling system security monitor (CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47, also col. 2, lines 4-8) is configured to selectively communicate said control data message between said signaling gateway and said signaling communication system in response to said control messages satisfying criteria

specified by corresponding ones of said templates (this is obvious, see for example, col. 5, lines 23-30).

Regarding claims 9 and 20, Silva teaches signaling system security monitor includes a memory (CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47, also col. 2, lines 4-8) storing states of respective ones of central office systems (this is obvious and taught in Silva, since this basically read on storing the status of each SSP. For example, if there is an unauthorized message that is sent or received at that particular SSP), said signaling system security monitor responsive to said states for selecting ones of said templates (this reads on For example, if there is an unauthorized message that is sent or received at that particular SSP then a prorate action will be taken, see col. 5, lines 46-50).

Claims 21-23 are rejected for the same reasons as discussed above with respect to claims 9 and 20. See also, col. 5, lines 23-45). Also, for claims 22-23, the particular service reads on the call transfer (see col. 5, lines 64-67 and col. 6, lines 1-2).

Claim 10 recite[5] "Signaling gateway further comprises a signal protocol converter configured to convert SS7 type messages to another packet data format". However, Silva teaches the standard SS7 protocol messages may be changed (see col. 5, lines 64-67 and col. 6, lines 1-10).

Claim 11 recites, "the other packet data format is an Internet Protocol (IP) format). Examiner takes official notice, since this is an obvious a well-known feature in the art.

Regarding claim 12, Silva teaches signaling system security monitor (CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47, also col. 2, lines 4-8) is configured to monitor information contained in an MTP Layer 3 portion of said control data messages (see col. 4, lines 61-65).

Regarding claims 13 and 15, Silva teaches MTP Layer 3 (see col. 5, lines 23-24), Silva also teaches information contained in said MTP Layer 3 portion of said control data messages includes a destination point code and origination point code (First, the destination and origination point code may read on the parameter ID, see col. 5, lines 3-15. Also, obviously a message can contain any information desired, such as destination and/or origination). Having a service indicator octet is an obvious and well-known limitation.

For claims 16-19, Silva teaches that the signaling system security monitor (CPU 82 accessing and processing the messages with RAM 92, see col. 4, lines 35-47, also col. 2, lines 4-8) configured to screen and filter the messages that are sent and received within the network. Silva teaches does not exactly teach that the monitoring is performed on the calling and the called party parameters.

However, this is obvious, because messages can be exchanged in the network between users (calling and called party) therefore monitoring and filtering these messages it is a must in order to keep a network clean (viruses and worms), plus restrict and minimize the use of emails and other multimedia for proposes other than the work requirement (see col. 5, lines 46-63).

Claim 24 recites "said signaling system security monitor comprises a certification agent configured to exchange and maintain encryption key certificates". This is obvious.

Regarding claim 25, Silva teaches the signaling system security monitor is configured to issue and encrypt digital time stamps (see col. 4, lines 40-47).

Claim 29 recites, "each of said templates corresponds to an appropriate one of a call progress and transaction processing protocol". See col. 4, lines 56-67).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beebe et al (US PAT # 6,226,372) teaches a system and method for implementing a fully integrated and cooperative telecommunications firewall/scanner that can be deployed either at a standalone device or over a large scale distributed client-server (see abstract).

Brysch et al (US PAT # 6,687,353) teaches a telephony security system and method for controlling and logging access between an enterprise' send-user stations at a plurality of customers site and their respective circuits into the public switched telephone network (PSTN). See abstract.

Heilmann et al (US PAT # 6,760,420) teaches a system and a method for of telephony resource management and security for monitoring and/or controlling and logging access between an enterprise's end-user stations ad their respective circuits (see abstract).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rasha S AL-Aubaidi whose telephone number is (703) 605-5145. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F Matar, can be reached on 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner

Rasha S. Al-Aubaidi

12/06/2004

AHMAD F. MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700